

IN THE CLAIMS:

Please cancel claims 1-6 without prejudice to or disclaimer of the subject matter recited therein.

Please add new claims 7-14 as follows:

LISTING OF CURRENT CLAIMS

Claims 1-6. (Canceled)

Claim 7. (New) A front derailleur for a bicycle, the bicycle having a chain, a chain wheel, a control cable, and a seat tube, the front derailleur comprising:

- 5 a) a frame bracket connected to the seat tube and located adjacent the chain wheel, the frame bracket having two lugs extending from a side thereof;
- b) a chain guide having:
 - i) a guide plate over-striding the chain; and
 - 10 ii) a pivot joint located on a side of the chain guide opposite the guide plate;
- c) a linkage rod being pivotally connected to the two lugs at a first end thereof and pivotally connected to the pivot joint at a second end thereof; and
- d) an actuating arm pivotally connected to the frame bracket by a shaft having a return spring providing a restoring force, the actuating arm having:
 - 15 i) a cable connector, the control cable connected to the cable connector and selectively controlling a movement thereof; and
 - ii) a pivot joint plate connected to the pivot joint,

20 wherein a movement of the chain guide is controlled by the control cable to move the chain between at least a highest speed mode and a lowest speed mode, when the chain guide is in the highest speed mode, the linkage rod is located at a position substantially parallel with the seat tube and the restoring force of the return

spring is equal to an active component force required for shifting the chain, such that the restoring force is utilized for down- shifting.

Claim 8. (New) The front derailleur according to claim 7, wherein the actuating arm having a first hole located on a middle section thereof, the frame bracket having a second hole located on a side of one of the two lugs, the shaft is connected at a first end to the first hole and at a second end to the second hole.

Claim 9. (New) The front derailleur according to claim 7, wherein the cable connector includes a cover plate and a screw connecting the control cable thereto.

Claim 10. (New) The front derailleur according to claim 7, when the linkage rod is between +10 degrees and -10 degrees of being parallel with the seat tube, the restoring force of the return spring is fully utilized during down- shifting from the highest speed mode.

Claim 11. (New) A front derailleur for a bicycle, the bicycle having a chain, a chain wheel, a control cable, and a seat tube, the front derailleur comprising:

- 5 a) a frame bracket connected to the seat tube and located adjacent the chain wheel, the frame bracket having two lugs extending from a side thereof;
- b) a chain guide having:
 - i) a guide plate over-striding the chain; and
 - ii) a pivot joint located on a side of the chain guide opposite the guide plate;
- 10 c) a linkage rod being pivotally connected to the two lugs at a first end thereof and pivotally connected to the pivot joint at a second end thereof; and
- d) an actuating arm pivotally connected to the frame bracket by a shaft, the actuating arm having:
 - 15 i) a cable connector, the control cable connected to the cable connector and selectively controlling a movement thereof; and

- ii) a pivot joint plate connected to the pivot joint;
- e) an extension spring providing a restoring force and connected to one of the two lugs at a first end and a connecting hole of the guide plate at a second end thereof, the connecting hole is located on an upper inward side of the guide plate,

20

25

wherein a movement of the chain guide is controlled by the control cable to move the chain between at least a highest speed mode and a lowest speed mode, when the chain guide is in the highest speed mode, the linkage rod is located at a position substantially parallel with the seat tube and the restoring force of the extension spring is equal to an active component force required for shifting the chain, such that the restoring force is utilized for down- shifting.

Claim 12. (New) The front derailleur according to claim 11, wherein the actuating arm having a first hole located on a middle section thereof, the frame bracket having a second hole located on a side of one of the two lugs, the shaft is connected at a first end to the first hole and at a second end to the second hole.

Claim 13. (New) The front derailleur according to claim 11, wherein the cable connector includes a cover plate and a screw connecting the control cable thereto.

Claim 14. (New) The front derailleur according to claim 11, when the linkage rod is between +10 degrees and -10 degrees of being parallel with the seat tube, the restoring force of the return spring is fully utilized during down- shifting from the highest speed mode.